ABSTRACT

[0055]   Policy domains are introduced, which include methods and algorithms for ensuring policy consistency within defined regions of one or more communications networks. Examples of such policies include network functions such as routing, filtering, security, authentication, information summarization and expansion. These policies may be organized into hierarchies of policy categories. The policy domains include mechanisms for adding and deleting policies while preserving consistency, as well a mechanisms for allowing fast synchronization and convergence of policies between local databases resident different nodes / peers in the networks. Policy domains may be delineated by pre-existing logical topologies, such as autonomous systems, or may have evolving boundaries.